

Chapter 13
Air Quality

Chapter 13. Air Quality

INTRODUCTION

Alternative 4, “EBMUD-Only Lower American River Delivery,” and Alternative 5, “Sacramento River Delivery,” in this REIR/SEIS include facilities that are very similar to those discussed for Alternative 3, “Joint Water Supply,” in the 1997 DEIR/EIS. The 1997 DEIR/EIS therefore includes a full discussion of the environmental setting for these alternatives, and that information is summarized below as appropriate. Because Alternative 6, “Freeport East Delivery,” Alternative 7, “Freeport South Delivery,” and Alternative 8, “Bixler Delivery,” include facilities in locations that were not described in the 1997 DEIR/EIS, additional information is provided in the “Affected Environment” section below.

In addition to the “Affected Environment,” the 1997 DEIR/EIS also includes descriptions of criteria that are used to determine the significance of impacts. These criteria are also summarized below.

AFFECTED ENVIRONMENT

Since publication of the 1997 DEIR/EIS, San Joaquin County has been designated as a severe nonattainment area for ozone. This change in designation was based on the county’s inability to meet its 1999 Clean Air Act deadline to attain the federal one-hour ozone standard. The downgrading of this designation requires that the county develop a new air quality plan within 18 months, specifically outlining new strategies that will allow it to attain the one-hour standard by November 15, 2005. The new designation does not, however, affect the establishment of significance criteria or conclusions of significance for the proposed project.

Climate and Air Quality Conditions

A full discussion of regional climate and atmospheric conditions, regulatory standards,

and existing air quality conditions for Sacramento and San Joaquin Counties is contained in the 1997 DEIR/EIS. The following information is provided to address aspects of the additional alternatives that were not evaluated in the 1997 DEIR/EIS and includes additional information on air quality standards in Contra Costa County to address Alternative 8, “Bixler Delivery.”

Both the State of California and the federal government have established ambient air quality standards for several different pollutants. The pollutants of greatest concern in the project area are carbon monoxide (CO), ozone, and inhalable particulate matter less than 10 microns in diameter (PM₁₀). A summary of state and federal ambient air quality standards is shown in Table 13-1.

As described in the 1997 DEIR/EIS, the project area in Sacramento and San Joaquin Counties is located in the southern end of the Sacramento Valley and the northern end of the San Joaquin Valley, respectively. These areas are subject to episodes of poor atmospheric mixing caused by inversion layers. Inversion layers limit vertical mixing in the atmosphere, trapping pollutants near the surface.

Air quality data for 1996-1999 from monitoring stations in Sacramento and San Joaquin Counties are summarized in Table 13-2 and Table 13-3 for Sacramento County and San Joaquin County, respectively.

The project area in Contra Costa County is in the northern portion of the Diablo Valley. The Diablo Valley is bordered to the north by the Carquinez Strait and to the south by the San Ramon Valley. The mountains to the west of the valley block much of the marine air circulating inland from the ocean, making the average wind speed approximately 5 miles per hour. During the daytime, there are two predominant flow patterns: an upvalley flow from the north

Table 13-1. Ambient Air Quality Standards Applicable in California

Pollutant	Symbol	Averaging Time	Standard, as parts per million		Standard, as micrograms per cubic meter		Violation Criteria	
			California	National	California	National	California	National
Ozone	O ₃	1 hour	0.09	0.12	180	235	If exceeded	If exceeded on more than 3 days in 3 years
Carbon monoxide	CO	8 hours	9.0	9	10,000	10,000	If exceeded	If exceeded on more than 1 day per year
		1 hour	20	35	23,000	40,000	If exceeded	If exceeded on more than 1 day per year
(Lake Tahoe only)		8 hours	6	N/A	7,000	N/A	If exceeded	N/A
Nitrogen dioxide	NO ₂	Annual average 1 hour	N/A	0.053	N/A	100	N/A	If exceeded
Sulfur dioxide	SO ₂	Annual average 24 hours	N/A 0.04	0.03 0.14	N/A 105	N/A 365	N/A If exceeded	If exceeded If exceeded on more than 1 day per year
		1 hour	0.25	N/A	655	N/A	N/A	N/A
Hydrogen sulfide	H ₂ S	1 hour	0.03	N/A	42	N/A	If equaled or exceeded	N/A
Vinyl chloride	C ₂ H ₃ Cl	24 hours	0.010	N/A	26	N/A	If equaled or exceeded	N/A
Inhalable particulate matter	PM ₁₀	Annual geometric mean	N/A	N/A	30	N/A	If exceeded	N/A
		Annual geometric mean 24 hours	N/A	N/A	N/A	50 150	N/A N/A	If exceeded If exceeded on more than 1 day per year
Sulfate particles	SO ₄	24 hours	N/A	N/A	25	N/A	If equaled or exceeded	N/A
Lead particles	Pb	Calendar quarter	N/A	N/A	N/A	1.5	N/A	If exceeded no more than 1 day per year
		30 days	N/A	N/A	1.5	N/A	If equaled or exceeded	N/A

Notes: All standards are based on measurements at 25°C and 1 atmosphere pressure.
National standards shown are the primary (health effects) standards.
N/A = not applicable.

Table 13-2. Updated CO, Ozone, and PM₁₀ Data for Sacramento County

Station Location	Yearly Monitoring Data			
	1996	1997	1998	1999
Carbon Monoxide				
<u>Sacramento–13th and T</u>				
High 1-hour (ppm)	9	8	NA	NA
High 8-hour (ppm)	6.8	6.0	7.1	5.7
Hours above standard ^a	0	0	0	0
Days above standard ^b	0	0	0	0
<u>Sacramento–El Camino and Watt Avenue</u>				
High 1-hour (ppm)	9	10	NA	NA
High 8-hour (ppm)	7.2	7.2	6	6.6
Hours above standard ^a	0	0	0	0
Days above standard ^b	0	0	0	0
Ozone				
<u>Sacramento–13th and T</u>				
1 st High (ppm)	0.097	0.085	0.098	0.088
2 nd High (ppm)	0.087	0.074	0.096	0.083
Days above standard ^c	3	4	4	4
<u>Elk Grove–Bruceville Road</u>				
1 st High (ppm)	0.106	0.091	0.110	0.104
2 nd High (ppm)	0.094	0.090	0.093	0.096
Days above standard ^c	9	3	4	7
<u>Folsom</u>				
1 st High (ppm)	0.078	0.101	0.137	0.129
2 nd high (ppm)	0.075	0.096	0.093	0.123
Days above standard ^c	0	8	26	18
PM₁₀				
<u>Sacramento–13th and T</u>				
High 24-hour (µg/m ³)	75	108	75	99
Geom Mean (µg/m ³)	22.2	20.9	19.9	23.7
Arith Mean (µg/m ³)	24.7	23.2	22.6	28.7
Days Above State Standard ^d	4	2	3	8
<u>Sacramento–Branch Center Road</u>				
High 24-Hour (µg/m ³)	68	85	81	86
Geom Mean (µg/m ³)	20.8	17.1	22.3	29.4
Arith Mean (µg/m ³)	24.1	20.6	27.0	33.1
Days Above State Standard ^d	2	3	8	11
<u>Sacramento–Stockton Boulevard</u>				
High 24-Hour (µg/m ³)	86	107	79	88
Geom mean (µg/m ³)	19.8	19.5	19.8	21.3
Arith Mean (µg/m ³)	21.6	22.7	23.6	25.1
Days Above State Standard ^d	2	2	4	3

^a Hours above standard = hours above state 1-hour standard of 20 ppm.
^b Days above standard = days above state 8-hour standard of 9 ppm.
^c Days above standard = days above national 8-hour standard of 0.08 ppm.
^d Days above standard = days above state 24-hour standard of 50 µg/m³

Table 13-3. Updated CO, Ozone, and PM₁₀ Data for San Joaquin County

Station Location	Yearly Monitoring Data			
	1996	1997	1998	1999
Carbon Monoxide				
<u>Stockton–Hazelton Street</u>				
High 1-hour (ppm)	9	8	NA	NA
High 8-hour (ppm)	6.4	3.6	7.1	5.3
Hours above standard ^a	0	0	0	0
Days above standard ^b	0	0	0	0
<u>Stockton–Claremont Avenue</u>				
High 1-hour (ppm)	11	6	NA	NA
High 8-hour (ppm)	7.6	4.2	8	7.6
Hours above standard ^a	0	0	0	0
Days above standard ^b	0	0	0	0
Ozone				
<u>Stockton–Hazelton Street</u>				
1 st High (ppm)	0.094	0.082	0.100	0.108
2 nd High (ppm)	0.087	0.078	0.088	0.093
Days above standard ^c	2	0	4	4
<u>Stockton–East Mariposa Street</u>				
1 st High (ppm)	0.105	0.101	0.123	0.143
2 nd High (ppm)	0.097	0.096	0.110	0.113
Days above standard ^c	4	3	9	4
<u>Tracy–Patterson Pass Road</u>				
1 st High (ppm)	0.140	0.119	0.116	0.132
2 nd High (ppm)	0.126	0.109	0.115	0.119
Days above standard ^c	24	5	14	16
PM₁₀				
<u>Stockton–Hazelton Street</u>				
High 24-Hour (µg/m ³)	127	98	106	150
Geom mean (µg/m ³)	23.7	26.8	24.4	30.2
Arith Mean (µg/m ³)	27.4	29.7	29.1	36.4
Days Above State Standard ^d	3	5	8	10
^a Hours above standard = hours above state 1-hour standard of 20 ppm. ^b Days above standard = days above state 8-hour standard of 9 ppm. ^c Days above standard = days above national 8-hour standard of 0.08 ppm. ^d Days above standard = days above state 24-hour standard of 50 µg/m ³				

and a westerly flow (wind from the west) across the lower elevations of the Coast Ranges. On clear nights, surface inversions separate the flow of air into two layers: the surface flow and the upper layer flow. When this happens, there are often drainage surface winds that flow down the valley toward the Carquinez Strait.

Pollution potential in the valley is relatively high. On winter evenings, light winds combined with surface-based inversions and terrain that restricts airflow can cause pollution levels to build up. In the summer months, ozone and ozone precursors are often transported into the valley from both the Central Bay Area and the Central Valley.

Table 13-4 provides CO, ozone, and PM₁₀ levels measured at several representative sampling stations in Contra Costa County between 1996 and 1999 (California ARB 2000).

Existing Air Quality Conditions

Alternative 4: EBMUD-Only Lower American River Delivery and Alternative 5: Sacramento River Delivery

The air quality conditions in the vicinity of the pipelines constructed under these alternatives are identical to those described for the intake facilities for Alternative 3, "Joint Water Supply," in the 1997 DEIR/EIS. The general area is subject to high levels of regional pollutants, including ozone and PM₁₀, as well as high levels of localized pollutants, such as CO near congested intersections and heavily traveled roadways.

Alternative 6: Freeport East Delivery

The pipeline alignment under this alternative lies solely within Sacramento County. It passes through both agricultural lands and residential areas, crossing several congested roadways and major arterials (State Route 99, Meadowview Road, Power Inn Road) that act as primary sources of localized air pollutants. Moderate levels of regional pollutants are found along the alignment, including ozone and PM₁₀.

Alternative 7: Freeport South Delivery

The pipeline alignment under this alternative traverses Sacramento and San Joaquin Counties, remaining in the I-5, Thorton Road, and Pacific Avenue rights-of-way. Land uses along the alignment include residential, industrial, and agricultural. The heavy traffic on I-5, Thorton Road, Pacific Avenue, and intersecting arterials produces a significant amount of localized air pollutants. Regional pollutants are also high in the area and include ozone and PM₁₀.

Alternative 8: Bixler Delivery

The Bixler intake would be located in Contra Costa County. The dominant land use around the intake and associated pipeline is agricultural, although several new residential developments are being constructed south of the project site. The general area is subject to high levels of regional pollutants, as well as moderate levels of localized pollutants from heavily trafficked roadways (e.g., State Route 4).

Regulatory Environment

The regulatory environment is fully described in the 1997 DEIR/EIS. Responsible local air quality management agencies whose jurisdiction covers the project areas are the Sacramento Metropolitan Air Quality Management District (SMAQMD), the San Joaquin Valley Air Pollution Control District (SJVAPCD), and the Bay Area Air Quality Management District (BAAQMD). Guidance from each agency was used in evaluating impacts within their jurisdictional areas.

ENVIRONMENTAL CONSEQUENCES

Methods and Assumptions

The facilities associated with Alternative 4, "EBMUD-Only Lower American River Delivery," and Alternative 5, "Sacramento River Delivery," are similar to those for Alternative 3, "Joint Water Supply," as described in the 1997

Table 13-4. Summary of CO, Ozone, and PM ₁₀ Monitoring Data for Contra Costa County				
Station Location	Yearly Monitoring Data			
	1996	1997	1998	1999
Carbon Monoxide				
<u>Bethel Island Road</u>				
Highest 1-hour concentration (ppm)	3	2	---	---
Highest 8-hour concentration (ppm)	1.40	1.51	1.57	1.40
Hours above standard ^a	0	0	---	---
Days above standard ^b	0	0	0	0
<u>Pittsburg-10th Street</u>				
Highest 1-hour concentration (ppm)	7	6	---	---
Highest 8-hour concentration (ppm)	2.9	3.2	2.7	3.3
Hours above standard ^a	0	0	---	---
Days above standard ^b	0	0	0	0
<u>Concord-2975 Treat</u>				
Highest 1-hour concentration (ppm)	6	6	---	---
Highest 8-hour concentration (ppm)	2.9	3.0	3.8	3.11
Hours above standard ^a	0	0	---	---
Days above standard ^b	0	0	0	0
<u>Richmond-13th Street</u>				
Highest 1-hour concentration (ppm)	5	5	---	---
Highest 8-hour concentration (ppm)	2.6	2.6	---	---
Hours above standard ^a	0	0	---	---
Days above standard ^b	0	0	---	---
<u>Richmond-San Pablo-El Portal</u>				
Highest 1-hour concentration (ppm)	---	4	---	---
Highest 8-hour concentration (ppm)	---	2.4	2.4	2.4
Hours above standard ^a	---	0	---	---
Days above standard ^b	---	0	0	0
Ozone				
<u>Bethel Island Road</u>				
1 st High (ppm)	0.10	0.08	0.10	0.10
2 nd High (ppm)	0.09	0.07	0.10	0.09
Days above standard ^c	3	0	5	5
<u>Pittsburg-10th Street</u>				
1 st High (ppm)	0.09	0.07	0.09	0.09
2 nd High (ppm)	0.09	0.07	0.08	0.08
Days above standard ^c	3	0	1	1
<u>Concord-2975 Treat</u>				
1 st High (ppm)	0.10	0.08	0.11	0.12
2 nd High (ppm)	0.10	0.08	0.10	0.11
Days above standard ^c	4	0	6	6
<u>Richmond-13th St</u>				
1 st High (ppm)	0.06	0.05	---	---
2 nd High (ppm)	0.05	0.04	---	---
Days above standard ^c	0	0	---	---

Table 13-4, Continued. Summary of CO, Ozone, and PM₁₀ Monitoring Data for Contra Costa County

Station Location	Yearly Monitoring Data			
	1996	1997	1998	1999
<u>Richmond–San Pablo–El Portal</u>				
1 st High (ppm)	---	0.08	0.06	0.07
2 nd High (ppm)	---	0.06	0.05	0.07
Days above standard ^c	---	0	0	0
PM₁₀				
<u>Bethel Island Road</u>				
Highest 24-hour concentration (µg/m ³)	76	77	67	101
Geometric mean (µg/m ³)	18.8	19.9	17.5	21.0
Arithmetic mean (µg/m ³)	21.1	22.3	20.0	25.3
Days above standard ^d	0	0	0	0
<u>Concord–2975 Treat</u>				
Highest 24-hour concentration (µg/m ³)	72	76	66	64
Geometric mean (µg/m ³)	16.1	17.4	16.5	18.1
Arithmetic mean (µg/m ³)	18.0	19.4	17.9	19
Days above standard ^d	0	0	0	0
<u>Richmond–13th Street</u>				
Highest 24-hour concentration (µg/m ³)	43	78	---	---
Geometric mean (µg/m ³)	18.6	23.0	---	---
Arithmetic mean (µg/m ³)	20.2	27.4	---	---
Days above standard ^d	0	0	---	---
<u>Richmond–San Pablo–El Portal</u>				
Highest 24-hour concentration (µg/m ³)	---	46	32	---
Geometric mean (µg/m ³)	---	16.4	16.0	---
Arithmetic mean (µg/m ³)	---	18.0	16.9	---
Days above standard ^d	---	0	0	---
^a Hours above standard = hours above state 1-hour standard of 20 ppm. ^b Days above standard = days above state 8-hour standard of 9 ppm. ^c Days above standard = days above national 8-hour standard of 0.08 ppm. ^d Days above standard = days above state 24-hour standard of 50 µg/m ³ .				
Source: California Air Resources Board 2000.				

DEIR/EIS. The primary difference between these alternatives in the REIR/EIS and Alternative 3 is the location and utilization of water treatment facilities. In the 1997 DEIR/EIS, water treatment for the extended pipeline would occur at expanded Fairbairn, Walnut Creek, Lafayette, and Orinda WTPs. In contrast, under Alternatives 4 and 5, a new WTP would be constructed adjacent to the Mokelumne Aqueducts, near the pumping plant described for Alternatives 2 and 3. The quantitative effect of this change is illustrated in Table 13-5, although the impacts and mitigation measures are the same as those for Alternative 3.

Alternative 6, "Freeport East Delivery," and Alternative 7, "Freeport South Delivery," are also similar to Alternative 3 in terms of regional air quality effects. The significance thresholds and criteria used in the 1997 DEIR/EIS also apply to this alternative. Alternative 8, "Bixler Delivery," is located within the jurisdictional boundary of the BAAQMD. For this alternative, the BAAQMD significance thresholds are used.

Construction-related emissions were calculated using emission rates from the EPA and the Midwest Research Institute (U.S. Environmental Protection Agency 1985, Midwest Research Institute 1995).

Significance Criteria

The significance criteria outlined in the 1997 DEIR/EIS were also applied in the evaluation of the alternatives included in this document. These criteria include assessing whether the alternatives would violate any ambient air quality standard; contribute substantially to an existing or projected air quality violation; or expose sensitive receptors to substantial pollutant concentrations.

In addition, the SMAQAMD's Air Quality Thresholds of Significance were used in determining project-related air quality impacts in Sacramento County. For San Joaquin County, the SJVUAPCD guidelines were used. Air quality issues in Contra Costa County were evaluated against the criteria outlined in BAAQMD policy. The BAAQMD does not provide specific guidance on construction

emissions limitations; instead, controlling measures, mandated in their CEQA Guidelines, are required to be implemented to ensure that the significant effects of construction emissions are reduced to a less-than-significant level (BAAQMD 1999).

Impacts Found to Be Less Than Significant

Alternative 8: Bixler Delivery

Impact. Short-Term Increase in ROG, NO_x and PM₁₀ Emissions from Construction of Bixler Delivery Project Facilities. Construction of an intake facility and water treatment plant at the Bixler delivery point could result in an increase in short term-emission levels. These increases are quantified in Table 13-5. However, implementation of the control measures outlined in the BAAQMD CEQA Guidelines would reduce air pollutant emissions from these construction activities to a less-than-significant level, minimizing the adverse affects associated with the implementation of this alternative. No mitigation is required.

Impact. Short-Term Increase in ROG, NO_x and PM₁₀ Emissions from Construction of Pipelines under the Advanced Treatment Option. Under this treatment option, pipelines would be constructed between the Bixler intake facility and Concord along the Mokelumne Aqueducts and within their right-of-way. Temporary increases in emission levels for this option are shown in Table 13-5. The control measures outlined in the BAAQMD CEQA Guidelines would be implemented to reduce these construction emissions to a less-than-significant level. No mitigation is required.

Impact. Short-Term Increase in ROG, NO_x and PM₁₀ Emissions from Construction of Pipelines between Bixler and Concord. Construction of the treated water and brine pipelines between Bixler and Concord along the Mokelumne Aqueducts right-of-way would result in a short-term increase in emission levels (Table 13-5). Implementation of the control measures outlined in the BAAQMD CEQA Guidelines would reduce these emissions to a

Table 13-5. Summary of ROG, NO_x, and PM₁₀ Emissions for Alternatives 4 through 8

	ROG		NO _x		PM ₁₀ *	
	ppd	tpy	ppd	tpy	ppd	tpy
Alternative 4: EBMUD-Only Lower American River Delivery						
Lower American River intake structure	68	9	315	39	118	15
Intake to FSC pipeline	5,450	682	17,368	2,172	1,298	162
FSC pumping plant	68	9	315	39	118	15
Alignment 2	851	106	2,864	358	396	50
Mokelumne Aqueducts pumping plant	68	9	315	39	118	15
WTP at Mokelumne Aqueducts location	55	7	156	19	65	8
Alternative 5: Sacramento River Delivery						
Sacramento River intake structure	68	9	315	39	118	15
Intake to FSC pipeline	5,450	682	17,368	2,172	1,298	162
FSC pumping plant	68	9	315	39	118	15
Alignment 2	851	106	2,864	358	396	50
Mokelumne Aqueducts pumping plant	68	9	315	39	118	15
WTP at Mokeulumne Aqueducts location	55	7	156	19	65	8
Alternative 6: Freeport East Delivery						
Sacramento River intake structure	68	9	315	39	118	15
Pipeline from intake to FSC	6,112	765	19,396	2,436	1,456	182
FSC pumping plant	68	9	315	39	118	15
Alignment 2	851	106	2,864	358	396	50
Mokelumne Aqueducts pumping plant	68	9	315	39	118	15
WTP at Mokelumne Aqueducts location	55	7	156	19	65	8
Alternative 7: Freeport South Delivery						
Sacramento River intake structure	68	9	315	39	118	15
Pipeline from intake south to Mokelumne Aqueducts	14,326	1,793	45,464	5,709	3,412	426
WTP at Bixler location	55	7	156	19	65	8
Alternative 8: Bixler Delivery						
Bixler intake	68	9	315	39	118	15
WTP at Bixler	55	7	156	19	65	8
Alternative 8, Advanced Treatment Option: Treated Water and Brine Pipelines						
Pipelines from Bixler intake to Concord	7,358	921	23,350	2,932	1,752	219
ppd = pounds per day tpy = total pounds per year						

less-than-significant level. No mitigation is required.

Significant Impacts and Mitigation

Alternative 4: EBMUD-Only Lower American River Delivery

Impact: Short-Term Increase in ROG, NO_x, and PM₁₀ Emissions from EBMUD-Only Project Facilities. The short-term impacts associated with this alternative are similar to those described in the 1997 DEIR/EIS for Alternative 3. Table 13-5 shows expected emissions associated with this alignment.

Mitigation Measure 13-1: Incorporate ROG and NO_x Emission-Reducing Measures into Pipeline and Pump Station Construction Plans. As described for Alternative 3 in the 1997 DEIR/EIS, implementation of mitigation measure 13-1 would reduce the impact of the ROG and NO_x emissions resulting from the proposed alignment, but not to a less-than-significant level. As a result, this impact is significant and unavoidable.

Alternative 5: Sacramento River Delivery

Impact: Short-Term Increase in ROG, NO_x, and PM₁₀ Emissions from Construction of Sacramento River Delivery Alternative Facilities. The impacts associated with this alternative would parallel those described for Alternative 3 in the 1997 DEIR/EIS. The location of the Sacramento River intake would add slightly to the overall length of the required pipeline in relation to the intakes outlined in Alternative 3. Although this increased length is expected to slightly increase emissions, for the purposes of this analysis, the difference was considered minimal. Table 13-5 summarizes temporary construction emissions for this alternative.

To minimize air quality impacts associated with this alternative, Mitigation Measure 13-1 would be implemented. However, impacts would not be reduced to a less-than-significant level, and they are considered significant and unavoidable.

Alternative 6: Freeport East Delivery

Impact: Short-Term Increase in ROG, NO_x, and PM₁₀ Emissions from Construction of the Freeport Delivery Alternative Facilities. Construction of an intake facility, pipeline, water pump station facility, and pretreatment facilities under Alternative 6 could result in considerable short-term emission levels, assuming that construction of all of the project elements occurs during the same period. Table 13-5 summarizes the project components and construction-related emissions that would result from the completion of each of the different alternative components. Because combined ROG, NO_x, and PM₁₀ emissions for this alternative exceed the SMAQMD threshold, this impact is considered significant and unavoidable.

To partially reduce the impacts associated with PM₁₀, the dust suppression plan described in detail in Chapter 2 of the 1997 DEIR/EIS would be implemented. Implementation of Mitigation Measure 13-1 would partially reduce the impact of ROG and NO_x emissions, but not to a less-than-significant level.

Alternative 7: Freeport South Delivery

The impacts associated with Alternative 7, including short-term increases in ROG, NO_x, and PM₁₀ emissions from construction activities, are identical to those outlined for Alternative 6. The impacts associated with the construction of this alternative are significant and unavoidable.

The dust suppression plan described in Chapter 2 of the 1997 DEIR/EIS would be implemented to partially reduce the construction impacts. The application of Mitigation Measure 13-1 would additionally reduce impacts, but not to a less-than-significant level.